# TO ALL THE OTHER DISEASES: P.S. WE STILL TEST FOR YOU A LOCAL PHL'S RESPONSE TO COVID-19

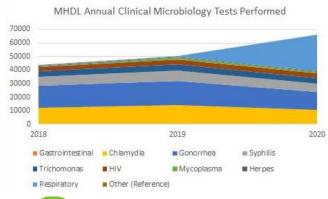
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# INTRODUCTION

- The City of Milwaukee Health Department Laboratory (MHDL) is one of only two
  public health laboratories (PHL) in the state of Wisconsin and was early in
  onboarding PCR testing for severe acute respiratory syndrome virus 2 (SARS-CoV-2) during the COVID-19 pandemic
- On average, MHDL receives 45,000-50,000/year clinical specimens for diagnostic testing, usually <2% are from respiratory sources and the vast majority are from sexually transmitted infection(STI) specimens
- MHDL adjusted throughout the pandemic to the rapid increase in testing demand in real time

# **CHALLENGES**

- Few trained molecular scientists
- · Low throughput extraction methods
- One ABI 7500DX instrument
- Nationwide shortages of reagents/consumables
- Overall sample volume increase of 23.6% from 2019

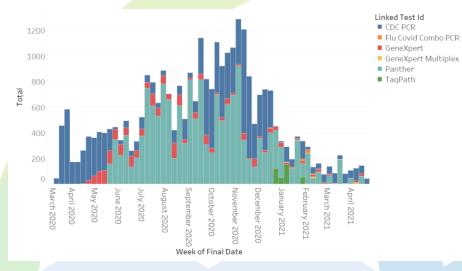




Presented @ APHL 2021 Annual Conference

# **RESPONSE**

- Cross-trained multiple staff from other sections to increase testing personnel from two to ten fully trained analysts with five more assisting in support roles
- Six different tests brought on using four different automated extractors and three analysis platforms. In addition, serology testing was brought on and rapid testing sites were set up with partners across the city, using the Abbott ID Now
- Flexibility: alternate work schedules were adopted for staff and depending on workload and reagent availability, daily testing would change between platforms and tests



- MHDL updated inventory tracking and monitoring to stay on top of reagent/consumable shortfalls
- Through joint efforts among all trained staff from multiple sections, >90% of specimens were turned around within 24 hours of receipt

# **MILESTONES & ACHIEVEMENTS**

- As of 12/30/2020, MHDL analyzed >25,000 specimens for SARS-CoV-2 with 2.579 Positives
- Clients were able to review results in real time through deployment of the MHDL web portal
- Even with increased COVID-19 workload, MHDL met its testing obligations and TAT for all other routine work
- Secured \$7.1 million in federal Epidemiology & Lab Capacity (ELC) Enhancing Detection COVID-19 funding, in partnership with the Wisconsin Department of Health Services (DHS)
- Secured \$147,745 CDC COVID-19 Sequencing Grant, in partnership with UW-Madison, UW-Milwaukee and University of Michigan

# IN THE FUTURE

- Systems in place for escalation/de-escalation of highvolume events
- Modifying and improving processes in preparation for future high-volume events
- Working to build community awareness of public health laboratories through outreach and education
- · Build wastewater surveillance capacity
- Expand genomic surveillance capacity

#### **ACKNOWLEDGEMENTS**

- Thanks to the Association of Public Health Laboratories (APHL), the Centers for Disease Control and Prevention (CDC), WI Department of Health Services (DHS), State Laboratory of Hygiene (WSLH), community, academic and corporate partners
- Funding from HHS CARES Act Public Health and Social Service Emergency Fund

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